4.4 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section of the EIR assesses potential effects to cultural resources that could result from implementation of the proposed project. Cultural resources are defined as prehistoric and historic-period archaeological resources and historic-period buildings and structures. This section briefly describes the cultural setting of the project area and discusses the overall cultural resource sensitivity of the project site. Applicable federal, state, and local regulations are identified, followed by impact analysis and mitigation measures, where available, to reduce adverse impacts on cultural resources. This section also addresses potential effects to paleontological resources that could result from implementation of the proposed project.

This section of the EIR is based on a cultural resources records search conducted by the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) (SCCIC 2008), a search of the Native American Heritage Commission's (NAHC) sacred lands database (NAHC 2008), and a paleontology records check conducted by the Natural History Museum of Los Angeles (McLeod 2008). Full bibliographic entries for all reference materials are provided in Section 4.4.5 (References) at the end of this section.

One comment letter was received during the Initial Study/Notice of Preparation (IS/NOP) comment period concerning cultural resources (Appendix A). The NAHC submitted a letter that included its recommendations for assessing project-related impacts on cultural resources. The recommendations included requesting a records search from the appropriate CHRIS information center, conducting an archaeological survey if warranted by the results of the records search, requesting the NAHC to search the Sacred Lands File, contacting the NAHC-provided list of Native American contacts to obtain their input on the project, and including in the EIR procedures for the identification and treatment of accidentally discovered archaeological resources and human remains. With the exception of an archaeological survey of the project site, which was not conducted due to the programmatic level of the investigation, all of the NAHC recommendations were followed in the cultural resource investigation conducted for the proposed project that is documented in this section of the EIR. All other comments received, if relevant, have been addressed in the appropriate section within this document.

4.4.1 Environmental Setting

Paleontological Setting

Paleontological resources include fossil remains, as well as fossil localities and rock or soil formations that have produced fossil material. Fossils are the remains or traces of prehistoric animals and plants. Fossils are important scientific and educational resources because of their use in: (1) documenting the presence and evolutionary history of particular groups of now extinct organisms, (2) reconstructing the environments in which these organisms lived, and (3) determining the relative ages of the strata in which they occur and of the geologic events that resulted in the deposition of the sediments that formed these strata and in their subsequent deformation.

From the northern boundary of the project site southward to approximately Warner Avenue, and in the southern portion of the project site from roughly Indianapolis Avenue southward to the southern boundary, the surficial deposits consist of younger Quaternary Alluvium. The central, elevated portion of the corridor has surface soils composed of marine Quaternary Terrace deposits. These deposits typically do not contain significant vertebrate fossils. Usually underlying these deposits are older Quaternary deposits that often do contain significant vertebrate fossils. West of the northern portion of the project site near Bolsa Chica Street, Pleistocene age specimens of mammoth were encountered between six and eight feet below the surface. In that same locality bison fossils were found between fourteen and twenty feet below the surface. West of the southern portion of the project site, fossil specimens of mammoth, bison, and horse were encountered. Marine terrace deposits are located in the central portion of the corridor; these deposits often contain diverse invertebrate fauna. In the coastal areas of the region, there are four localities within 2 miles of the project site which contain invertebrate fossils.

Prehistoric Setting

The project lies within the archaeological San Diego Subregion of the Southern Coastal Region. The earliest known archaeological culture in the subregion is the San Dieguito Complex. It is typified by the C.W. Harris site, located on the San Dieguito River. Radiocarbon readings from this site date the complex to between 9030 BP to 8490 BP. Artifacts associated with this complex are two different forms of leaf-shaped knives, foliate to ovoid bifaces, foliate and short-bladed shouldered points, crescents, engraving tools, choppers, core hammers, pebble hammerstones, cores and various types of scrapers.

The San Dieguito is followed by the well-established La Jolla Complex. Radiocarbon dates from several sites date the beginning of this complex to circa 8360 BP and to have lasted until roughly 3000–2000 BP. Different researchers have divided the La Jolla Complex into two or three phases to reflect developmental changes. The more recent of these phase schemes recognizes La Jolla I (7500–5500 BP), which is characterized by flexed burials, the first appearance of millingstones, and percussion based scrapers; La Jolla II (5500–4000 BP), identified by true cemeteries, ground stone discoidal artifacts, as well as several types of projectile points; and La Jolla III (4000–3000 BP), which shows cultural influences from the east as evidenced by the introduction of cremations rather than inhumation. The later end of the La Jolla Complex showed a shift to more inland resources rather than lagoon-based shellfish collecting, though marine-oriented subsistence patterns remained in highly productive areas.

The following years again showed an increased reliance on inland resources. The focus of this new economic trend was acorn exploitation. Pestles and mortars became much more common in the archaeological record as well as pottery. In coastal Orange County, littoral adaptations remained important. Irving Complex (1400-550 BP) sites have yielded abundant littoral resources; at one site, CA-ORA-190, sixty-five species of marine invertebrates, three marine mammals, and eleven species of fish were recovered.

Ethnographic Setting

The project site lies within the traditional territory of the Gabrieliño. Their territory included most of modern Los Angeles and Orange Counties as well as San Clemente, Santa Catalina, and San Nicolas

islands. At the time of Spanish contact they were, with the possible exception of the Chumash, the wealthiest, most populous, and most powerful ethnic nationality in aboriginal southern California. Their influence extended far north to the San Joaquin Valley, east to the Colorado River Basin, and south into Baja California. By the time of systematic ethnographic studies, however, their population and culture had been decimated, and therefore little is actually known about them.

The Gabrieliño language was one of the Cupan languages in the Takic family, itself part of the larger Uto-Aztecan linguistic stock. The language was broken up into at least four dialects-Gabrieliño proper, Fernandeno, Santa Catalina Island dialect, and the San Nicolas Island dialect. The name Gabrieliño refers to San Gabriel, one of the two main Spanish missions established in Gabrieliño territory. Population estimates for their population at the time of Spanish contact are difficult to make. Somewhere between fifty and one hundred mainland villages were inhabited at a given time, with a population between fifty and two hundred individuals at each village.

The material culture of the Gabrieliño showed an elaborate artisanship, with many utilitarian items decorated with shell inlaid in asphaltum, rare minerals, carvings, and painting. They are best known for their objects made of steatite. A thriving steatite industry exited on the Santa Catalina Islands, which exported raw steatite as well as finished goods to the mainland. These goods included both utilitarian and ritual objects such as pots, pipes, and ornaments. Some of the tools they fashioned included saws made from deer scapulae, bone or shell needles, fishhooks and awls, scrapers, wedges, hafted and non-hafted flint knives, and flint drills. Baskets were made from the stems of rushes, grass, and squawbush. Crafted baskets had a variety of forms, including flat baskets for plates, shallow carrying or serving baskets, winnowers, several sizes of storage baskets, and various ceremonial baskets. A variety of weapons were also made, such as three different kinds of war clubs, self- and sinew-back bows, wooden sabers, throwing clubs, and slings used for hunting birds and small game.

The Gabrieliño also constructed several structures. Their homes were domed, circular structures thatched with tule, fern, or Carrizo. Some of these houses were sixty feet in diameter, housing three or four families each. Another commonly found structures in villages included menstrual huts and sweathouses, which were small, semicircular, and earth-covered. These were generally used as social meeting places for men. An open-air enclosure was built for ceremonial purposes. It was usually built near the chief's house and was consecrated before every ceremony.

The social system of the Gabrieliño is relatively unknown, and often the information is contradictory. There did appear to be at least three hierarchical social classes; an elite who spoke a specialized language and included the chief, his immediate family, and the very rich; a middle class comprised of the fairly well to do and those from long established lineages; and a third class which included everyone else. Some individuals owned real estate, with property boundaries marked by paintings of the owners personalized tattoo on trees, posts, and rocks. Villages were composed of several lineages and politically autonomous. Each lineage had its own leader. During various times of the year the village would segment into smaller units to collect resources and then return to the village. The leader of the dominant lineage was usually the village chief. His, and occasionally her, power was legitimized by the possession of a sacred bundle, which was seen as a link between the sacred past and the present. It was also regarded as being the

material representation of the spirit of the people and a focus of power. Chiefs sometimes were the political heads of several village confederations.

Shamans also held authority, in some respects greater than the chiefs as they could only be punished by other shamans. Shamans gained their power directly from the supernatural through dreams or visions, often caused by ingesting datura. Shamans generally served their own village. They had the power both to cure as well as cause illness. They also served as diviners, supernatural guardians of the sacred bundle, locators of lost items, collectors of poisons, and rainmakers. Some had the ability to shift into bear form and handle fire without fear of being burned. They could also bestow curses. If a shaman became too malevolent, however, and practiced evil against his own people, other shamans would convene and strip him of his power.

Spanish explorers visited the Santa Catalina in 1520 and again in 1602. It was not until 1769 that extended contact was initiated when Gaspar de Portola crossed their territory. This was likely also the first time European diseases began decimating the population.

Historic-Period Setting

Mission San Gabriel was established by the Spanish in 1771. Few Gabrielinos chose to accept the faith of the Spaniards, but most did integrate into the economic and social life of the Spanish. Conversion to Christianity accelerated in 1778, when several chiefs converted to the new religion. It was also around this time that conflicts between the military and church became acute, as each wanted authority over Indian labor. Increasingly bad conditions over the next several years resulted in an Indian revolt in 1785. The failed revolt was led by Toypurina, a chief's daughter. This resulted in an apartheid-like policy between the Spanish and the Indians. By 1800, most of the Gabrielinos were dead, had been missionized, or had fled to other areas. The next several decades brought more integration into the local economy, scattering of Gabrielinos, more Indians from outside the area brought into the mission, and disease.

Mexico gained independence from Spain in 1822. California did not officially become a territory of Mexico until March 26, 1825. The twenty-five years of Mexican rule would see the end of the Mission system, which originally was not supposed to last more than a decade, but had instead become the oldest, most stable, and most economically successful organization yet seen in California. By 1834 a plan had been established to secularize the missions by taking an inventory of mission properties and distribute shares of land, seed, cattle, and implements among the Indian population. The plan failed from the start, with most Indians running away as soon as they gained their freedom.

It was also during this period that foreigners entered California, mostly Americans. This small number of immigrants soon adopted Mexican citizenship, married into wealthy local families, and soon dominated commerce and industry in the state. Soon enough they were powerful, and numerous enough, to constitute a threat to the Mexican government in California. There had long been tension for the United States to annex California, and this became possible in 1846 with the outbreak of the Mexican War. The war ended in February of 1848 with the signing of the Treaty of Guadalupe Hidalgo, which ceded California to the United States. California was admitted as the thirty-first state in the Union on September 9, 1850.

In 1889 Orange County was established from a part of Los Angeles County. The modern day city of Huntington Beach used to be called Pacific Beach. The name was changed in 1903 in honor of Henry E. Huntington. He was a nephew of the railroad magnate Collis P. Huntington. He was also promoter of most of the electric railroads in southern California. The city produces large amounts of oil, and saw large growth during the Second World War, with several housing tracts constructed around the oil derricks that are to be found in the area. It is best known today as a residential and resort community.

Cultural Resources

City of Huntington Beach General Plan

According to the Historic and Cultural Resources Element of the City's General Plan, one local landmark is located within the project boundaries—the Early Fire Station. This structure is located at 17211 Beach Boulevard, south of Warner Avenue, and is currently occupied by a Subway Restaurant.

SCCIC Records Search

A records and literature search was conducted at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System at the California State University, Fullerton. The search included a review of all recorded archaeological sites within a quarter-mile radius of the project site as well as a review of cultural reports on file. In addition, the California Points of Historical Interest (PHI), the California Historical Landmarks (CHL), the California Register of Historical Resources (CR), the National Register of Historic Places (NR), and the California State Historic Resources Inventory (HRI) listings were reviewed for the proposed project.

A total of six archaeological sites were identified within a quarter-mile radius of the project site. Two of these sites, CA-ORA-296 and CA-ORA-358, are located within the project boundaries. In addition, the Newland House Museum (the restored Victorian home of Huntington Beach pioneers, Mr. and Mrs. W.T. Newland) was identified as within a quarter-mile radius of the project site, but not within the current project boundary. Thirty-three previous studies have been conducted within a quarter-mile radius of the project boundaries, eleven of which fall within the project site.

CA-ORA-296 is located on the west side of Newland Avenue between Slater Avenue and Talbert Avenue. The site was first recorded by Bursztynsky in 1971. The site was discovered in what was then a 5-acre agricultural field behind a row of houses and eucalyptus trees. The depth of the archaeological deposit is unknown, but artifacts were reportedly churned to the surface during plowing one and a half feet below the surface. Among the items that were identified were a total of four or five cog stones, three pestles, a portable mortar, a round mano, and a possible human anklebone. The site record notes that destruction of the site was imminent with the construction of housing tracts and roads. The second site, CA-ORA-358, was discovered by Elliot and Marquette in 1972. It is located on the corner of Indianapolis and Beach Boulevard. The site consists of a small, twenty by thirty meter possible campsite. Artifacts noted included a piece of worked, red glass, numerous flake and core fragments, cores of various materials, and a possible scraper. The record notes that the site was heavily disturbed. Two of the

four sites outside the project site, but within a quarter-mile radius, contained one or more human burials. Depths of the deposits ranged from one to four feet below the surface.

The eleven previous studies located within the project boundaries include four archival reviews, two archaeological surveys, four location specific assessments, and one monitoring report. No previously undiscovered cultural resources were encountered during the surveys within the project site.

Native American Consultation

PBS&J cultural resources staff requested the Native American Heritage Commission (NAHC) to search its sacred lands database to determine if any Native American cultural resources are located on or near the project site. The NAHC response letter stated that the search of the sacred lands database indicated the presence of Native American cultural resources in the immediate project area and nearby locales. The letter also noted that the general area of the project was considered very culturally sensitive. The NAHC letter also included a list of ten Native American organizations and individuals who may have knowledge of cultural resources in the project area. Letters that included a brief description of the project and a project map were sent to each organization/individual identified on the NAHC list. As of the printing of this document, PBS&J has received two responses from Native American individuals identified by the NAHC. Mr. Robert F. Dorame, Cultural Consultant, Gabrieliño Tongva Nation contacted PBS&J Historian Steve Smith by telephone on November 13, 2008 to express his concerns about the Native American resource sensitivity of the project area (Dorame 2008). In a letter dated February 17, 2009, Sam Dunlap, Tribal Secretary for the Gabrieliño Tongva Nation, stated that the southern portion of the project site is within ½ mile of recorded Native American burial grounds; the project extends across natural waterways, which were prime prehistoric habitation and food gathering locations; and previous development in the project area (including channelization of waterways) did not adequately protect cultural resources of the Gabrieliño Tongva Nation. For these reasons, Mr. Dunlap recommends Native American construction monitoring as a necessary mitigation measure and requests the consideration of members of the Gabrieliño Tongva Nation as monitors (Dunlap 2009).

4.4.2 Regulatory Setting

Federal

Federal regulations for cultural resources are primarily governed by Section 106 of the NHPA of 1966, which applies to actions taken by federal agencies. The goal of the Section 106 review process is to offer a measure of protection to sites that are determined eligible for listing on the NRHP. The criteria for determining NRHP eligibility are found in 36 Code of Federal Regulations (CFR) Part 60. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and affords the federal Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 CFR Part 800. The NRHP criteria (contained in 36 CFR 60.4) are used to evaluate resources when complying with NHPA Section 106. Those criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and any of the following:

(a) Are associated with events that have made a significant contribution to the broad patterns of our history
(b) Are associated with the lives of persons significant in our past
(c) Embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction
(d) Have yielded or may be likely to yield, information important to history or prehistory

Archaeological site evaluation assesses the potential of each site to meet one or more of the criteria for NRHP eligibility based upon visual surface and subsurface evidence (if available) at each site location, information gathered during the literature and records searches, and the researcher's knowledge of and familiarity with the historic or prehistoric context associated with each site.

The American Indian Religious Freedom Act, Title 42 United States Code, Section 1996, protects Native American religious practices, ethnic heritage sites, and land uses.

State

Under CEQA, public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to *Public Resources Code* (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether proposed projects would have effects on "unique archaeological resources."

"Historical resource" is a term with a defined statutory meaning (refer to PRC Section 21084.1 and CEQA Guidelines, Section 15064.5, subdivisions (a) and (b)). The term embraces any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR). The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be "historical resources" for purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC Section 5024.1 and *California Code of Regulations*, Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project's impacts to historical resources (PRC Section 21084.1 and CEQA Guidelines Section 15064.5, subdivision (a)(3)). In general, an historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that:

(a) Is historically or archeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and

(b) Meets any of the following criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2) Is associated with the lives of persons important in our past;
3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4) Has yielded, or may be likely to yield, information important in prehistory or history.

(CEQA Guidelines, Section 15064.5(a)(3))

Archaeological resources can sometimes qualify as "historical resources" (CEQA Guidelines, Section 15064.5 subdivision (c)(1)). In addition, PRC Section 5024 requires consultation with the Office of Historic Preservation when a project may impact historical resources located on State-owned land.

For historic structures, CEQA Guidelines Section 15064.5, subdivision (b)(3), indicates that a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995) shall mitigate impacts to a level of less than significant. Potential eligibility also rests upon the integrity of the resource. Integrity is defined as the retention of the resource's physical identity that existed during its period of significance. Integrity is determined through considering the setting, design, workmanship, materials, location, feeling, and association of the resource.

As noted above, CEQA also requires lead agencies to consider whether projects will impact "unique archaeological resources." PRC Section 21083.2, subdivision (g), states that "'unique archaeological resource' means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

(Pub. Resources Code, §21083.2, subdivision (g))

Treatment options under Section 21083.2 include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a "unique archaeological resource").

Advice on procedures to identify cultural resources, evaluate their importance, and estimate potential effects is given in several agency publications such as the series produced by the Governor's Office of Planning and Research (OPR). The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including but not limited to, museums, historical commissions, associations and societies, be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains.

Section 7050.5(b) of the California Health and Safety code specifies protocol when human remains are discovered. The code states:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in section 5097.98 of the Public Resources Code.

CEQA Guidelines Section 15064.5, subdivision (e), requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the lead agency must consult with the appropriate Native Americans, if any, as timely identified by the NAHC. Section 15064.5 directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

As of March 1, 2005, Senate Bill 18 (Government Code Sections 65352.3, 65352.4) requires that, prior to the adoption or amendment of a general plan proposed on or after March 1, 2005, a city or county must consult with Native American tribes with respect to the possible preservation of, or the mitigation of impacts to, specified Native American places, features, and objects located within that jurisdiction.

Local

General Plan Historic and Cultural Resources Element

This element identifies the historical resources of the community, their current designations and community status, and the issues affecting their future. Goals and policies presented in the Historic and Cultural Resources Element of the City of Huntington Beach General Plan related to cultural resources that are potentially relevant to the proposed project are listed below, along with an assessment of the proposed project's potential to conflict with the policies.

Goal HCR 1 To promote the preservation and restoration of the sites, structures and districts which have architectural, historical, and/or archaeological significance to the City of Huntington Beach.

Objective HCR 1.1 Ensure that all of the City's historically and archaeologically significant resources are identified and protected.

Consistency Analysis

The records search conducted at the South Central Coastal Information Center indicated that archaeological resources are present in the vicinity and within the project site. In addition, the NAHC indicated the presence of Native American cultural resources in the immediate project area and noted that the general area of the project was considered very culturally sensitive. Finally, a Native American contact provided by the NAHC contacted PBS&J to express his concerns about the Native American resource sensitivity of the project area. Therefore, the project site is considered to be sensitive for the presence of archaeological resources and Native American resources, including human remains.

The records search failed to find any historical resources within the project boundary, although the search results did identify the Newland House Museum (the restored Victorian home of Huntington Beach pioneers, Mr. and Mrs. W.T. Newland) within a quarter-mile radius of the project site.

The records search conducted at the Natural History Museum of Los Angeles County indicated that invertebrate fossils are likely to be found in the central portion of the project site and that vertebrate fossils could be encountered in the northern and southern portions of the project if ground-disturbing activities extended deep enough below the surface. Fossil finds in the vicinity of the project indicate that this could be as little as 6 feet or as much as twenty feet below the surface. The project is therefore considered to be sensitive for paleontological resources.

Mitigation measures included in this section would ensure that if cultural or paleontological materials are encountered during site development, these materials would be identified, assessed as to significance, and, if necessary, appropriate action taken. Therefore the proposed project would not conflict with this policy.

4.4.3 Project Impacts and Mitigation

Analytic Method

The impact analysis for cultural resources is based on the findings of the cultural records search conducted for the proposed project by the SCCIC and correspondence with the NAHC and NAHC-identified individuals and organizations, and a literature research performed by PBS&J.

The impact analysis for paleontological resources is based on the findings of the paleontological records search conducted by the Natural History Museum of Los Angeles County Museum for the proposed project.

Thresholds of Significance

The following thresholds of significance are based on Appendix G to the 2009 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would do any of the following:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature
- Disturb any human remains, including those interred outside of formal cemeteries

Effects Not Found to Be Significant

There are no Effects Not Found to be Significant with respect to cultural resources. All of the CEQA Thresholds are addressed in the following section.

Impacts and Mitigation Measures

Threshold	Would the project cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5 of the CEQA Guidelines?

Impact 4.4-1 **Construction activities associated with implementation of the proposed project could cause a substantial adverse change in the significance of an historical resource pursuant to Section 15064.5 of the CEQA Guidelines. Even with mitigation measures, this impact is considered *significant and unavoidable*.**

A cultural resources records search performed by the SCCIC in September of 2008 identified several cultural resource surveys that have been conducted within and adjacent to the project site, but no recorded historical resources were identified on the project site. The records search did identify the Newland House Museum (the restored Victorian home of Huntington Beach pioneers, Mr. and Mrs. W.T. Newland) within a quarter-mile radius of the project site. In particular, the Newland House is located immediately outside of the project boundaries within the existing shopping center along Beach Boulevard, north of Adams Avenue. The shopping center is within the project boundaries; however, the Newland House is technically part of Bartlett Park, which lies adjacent to, and east of, the shopping center.

Although the SCCIC records search did not identify any previously recorded historical resources within the project site, the City's General Plan includes one structure that is identified as a local landmark within the project boundaries. Specifically, the early Fire Station is located at 17211 Beach Boulevard, south of Warner Avenue, within the Neighborhood Boulevard segment. The Historical Resources Board's (HRB) listing of such local landmarks in the General Plan is intended to protect and/or preserve the structures

and places identified. Consequently, it is unlikely that any future development would be proposed on that site. Similarly, implementation of the proposed project would not change any of the existing regulations governing historical resources. However, implementation of the Specific Plan as a whole and the associated development that could occur under the revised land use development standards would not preclude the possibility that previously unrecorded historic-period resources could be adversely affected by future development of the project site (e.g., demolition, relocation, or alteration of historic-period buildings or structures). Impacts on historical resources are, therefore, considered potentially significant.

MM4.4-1 *Prior to development activities that would demolish or otherwise physically affect buildings or structures 45 years old or older or affect their historic setting, the project applicant shall retain a cultural resource professional who meets the Secretary of the Interior's Professional Qualifications Standards for Architectural History to determine if the project would cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. The investigation shall include, as determined appropriate by the cultural resource professional and the City of Huntington Beach, the appropriate archival research, including, if necessary, an updated records search of the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System and a pedestrian survey of the proposed development area to determine if any significant historic-period resources would be adversely affected by the proposed development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any historical resources within the development area and includes recommendations and methods for eliminating or reducing impacts on historical resources. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or reducing impacts on historical resources identified in the technical report or memorandum.*

Implementation of mitigation measure MM4.4-1 would require a qualified professional to conduct site-specific historical resource investigations for future developments within the project area that would demolish or otherwise physically affect buildings or structures 45 years old or older or affect their historic setting. Nonetheless, development within the project area could result in demolition or removal of significant historical resources, which would result in a significant impact. While implementation of site-specific mitigation measures, such as written and photographic documentation of significant historical resources, would reduce the magnitude of this impact, the impact would remain significant due to the potential for future physical demolition of a historical property. Consequently, impacts on historical resources are considered ***significant and unavoidable.***

Threshold	Would the project a cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or disturb human remains?

Impact 4.4-2 **Construction activities associated with implementation of the proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or disturb human remains. However, with mitigation measures, this impact is considered *less than significant*.**

The records search conducted at the South Central Coastal Information Center indicated that archaeological resources are present in the vicinity and within the project site. These sites have likely been destroyed or capped since they were first discovered. The exact depth of the sites was never established, but other sites in the vicinity had at least moderately deep deposits. Sites both within the project boundaries and in the project vicinity contained human remains. In addition, the NAHC indicated the presence of Native American cultural resources in the immediate project area and noted that the general area of the project was considered sensitive for cultural resources. Finally, representatives from the Gabrieliño Tongva Nation contacted PBS&J to express their concerns about the sensitivity of the project area for Native American resources and burial grounds. Therefore, the project site is considered to be sensitive for the presence of Native American cultural resources, including human remains. Impacts on archaeological resources from project-related earth-disturbing activities are therefore considered potentially significant.

MM4.4-2(a) *Prior to any earth-disturbing activities (e.g., excavation, trenching, grading) that could encounter undisturbed soils, the project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to determine if the project could result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines or disturb human remains. The investigation shall include, as determined appropriate by the archaeologist and the City of Huntington Beach, an updated records search of the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System, updated Native American consultation, and a pedestrian survey of the area proposed for development. The results of the investigation shall be documented in a technical report or memorandum that identifies and evaluates any archaeological resources within the development area and includes recommendations and methods for eliminating or avoiding impacts on archaeological resources or human remains. The measures shall include, as appropriate, subsurface testing of archaeological resources and/or construction monitoring by a qualified professional and, if necessary, appropriate Native American monitors identified by the applicable tribe (e.g., the Gabrieliño Tongva Nation) and/or the Native American Heritage Commission. The methods shall also include procedures for the unanticipated discovery of human remains, which shall be in accordance with Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or avoiding impacts on archaeological resources identified in the technical report or memorandum. Projects that would not encounter undisturbed soils*

and would therefore not be required to retain an archaeologist shall demonstrate non-disturbance to the City through the appropriate construction plans or geotechnical studies prior to any earth-disturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with MM4.4 2(b).

MM4.4-2(b) *If evidence of an archaeological site or other suspected historical resource as defined by CEQA Guidelines Section 15064.5, including darkened soil representing past human activity ("midden"), that could conceal material remains (e.g., worked stone, fired clay vessels, faunal bone, hearths, storage pits, or burials) are discovered during any project-related earth-disturbing activities (including projects that would not encounter undisturbed soils), all earth-disturbing activity within 100 feet of the find shall be halted and the City of Huntington Beach shall be notified. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the archaeologist and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the appropriate Information Center.*

Implementation of mitigation measures MM4.4-2(a) and MM4.4-2(b) would ensure that this impact is reduced to a ***less-than-significant*** level by requiring *(a)* a qualified professional to conduct site-specific cultural resource investigations and impact mitigation for future development that could encounter undisturbed soils and *(b)* requiring all earth-disturbing activity to be halted within 100 feet of any discovered cultural resources until a qualified professional can assess the significance of the find and implement appropriate mitigation of significant impacts.

Threshold	Would the project directly or indirectly destroy a unique paleontological resource or site or geologic feature pursuant to Section 15064.5 of the CEQA Guidelines?

Impact 4.4-3 **Construction activities associated with implementation of the proposed project could directly or indirectly destroy a unique paleontological resource or site or geologic feature pursuant to Section 15064.5 of the CEQA Guidelines. However, with mitigation measures, this impact is considered *less than significant*.**

A paleontological records search performed by the Natural History Museum of Los Angeles County Museum in September of 2008 for the proposed project failed to identify any previously recorded paleontological resources within the project site. The search did identify several paleontological resources in the project vicinity as well as soils that often contain vertebrate and invertebrate fossils. In the northern and southern portions of the project site, vertebrate fossils are unlikely to be disturbed with only shallow ground disturbance. Deeper ground excavation is likely to encounter fossil vertebrates. In the central portion of the project site the chance of encountering invertebrate fossils is high if the Marine terrace deposits are penetrated. The project site is considered sensitive for paleontological resources, and impacts to paleontological resources from project-related ground-disturbing activities are therefore considered ***potentially significant***.

MM4.4-3(a) *Prior to any earth-disturbing activities (e.g., excavation, trenching, grading) that could encounter undisturbed soils, the project applicant shall retain a professional paleontologist to determine if the project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The investigation shall include, as determined appropriate by the paleontologist and the City of Huntington Beach, a paleontology records check and a pedestrian survey of the area proposed for development. The results of the investigation shall be documented in a technical report or memorandum that identifies the paleontological sensitivity of the development area and includes recommendations and methods for eliminating or avoiding impacts on paleontological resources or unique geologic features. The technical report or memorandum shall be submitted to the City of Huntington Beach for approval. As determined necessary by the City, environmental documentation (e.g., CEQA documentation) prepared for future development within the project site shall reference or incorporate the findings and recommendations of the technical report or memorandum. The project applicant shall be responsible for implementing methods for eliminating or avoiding impacts on paleontological resources or unique geologic features identified in the technical report or memorandum. Projects that would not encounter undisturbed soils and would therefore not be required to retain a paleontologist shall demonstrate non-disturbance to the City through the appropriate construction plans or geotechnical studies prior to any earth-disturbing activities. Projects that would include any earth disturbance (disturbed or undisturbed soils) shall comply with MM4.4-3(b).*

MM4.4-3(b) *Should paleontological resources (i.e., fossil remains) be identified at a particular site during project construction, the construction foreman shall cease construction within 100 feet of the find until a qualified professional can provide an evaluation. Mitigation of resource impacts shall be implemented and funded by the project applicant and shall be conducted as follows:*

1. *Identify and evaluate paleontological resources by intense field survey where impacts are considered high*
2. *Assess effects on identified sites*
3. *Consult with the institutional/academic paleontologists conducting research investigations within the geological formations that are slated to be impacted*
4. *Obtain comments from the researchers*
5. *Comply with researchers' recommendations to address any significant adverse effects where determined by the City to be feasible*

In considering any suggested mitigation proposed by the consulting paleontologist, the City of Huntington Beach staff shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, applicable policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.

Implementation of mitigation measures MM4.4-3(a) and MM4.4-3(b) would ensure that this impact is reduced to a ***less-than-significant*** level by requiring *(a)* a qualified professional to conduct site-specific paleontological resource investigations and impact mitigation for future development that could encounter undisturbed soils and *(b)* requiring all earth-disturbing activity to be halted within 100 feet of any discovered paleontological resources until a qualified professional can assess the significance of the find and implement appropriate mitigation of significant impacts.

4.4.4 Cumulative Impacts

The cumulative analysis for impacts on cultural and paleontological resources considers a broad regional system of which the resources are a part. The cumulative context for the cultural and paleontological resources analysis is Orange County as a whole. While the project-specific impact analysis for cultural resources necessarily includes separate analyses for historic-period resources and archaeological resources, the cumulative analysis combines these resources into a single, non-renewable resource base and considers the additive effect of project-specific impacts to significant regional impacts on cultural resources.

Threshold	Would the project, in combination with other projects in the region, including Orange and Los Angeles counties, cause a substantial adverse change in the significance of historical or archaeological resources or disturb human remains?

Because all cultural resources are unique and non-renewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. Federal, state, and local laws protect cultural resources in most instances. Even so, it is not always feasible to protect cultural resources, particularly when preservation in place would frustrate implementation of projects. For this reason, the cumulative effects of development in the Orange County region are considered significant. Implementation of mitigation measures MM4.4-1 and MM4.4-2(a) and MM4.4-2(b) would require qualified professionals to conduct site-specific cultural resource investigations for future development of the project site and require all earth-disturbing activity to be halted within 100 feet of any discovered resources until a qualified professional can assess the significance of the find and implement appropriate mitigation of significant impacts. However, because it is currently infeasible to determine whether future development under the proposed Specific Plan would result in demolition or removal of historical resources within the project boundaries, the project's incremental contribution to these cumulative effects could be cumulatively considerable (i.e., the project could contribute to the loss of historical resources in Orange County). Therefore, this would be considered a ***significant cumulative impact***.

Threshold	Would the project in combination with other projects in the region cause a substantial adverse change in the significance of paleontological resources?

The proposed project, in combination with other development in the region could contribute to the loss of significant paleontological resources. Because all significant paleontological resources are unique and non-renewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. The loss of any one paleontological site affects all others in a region because these resources are best understood in the context of the entirety of the ancient ecologic system of which they formed a part. The boundaries of paleontologically important sites are not limited by property boundaries. Consequently, a meaningful approach to preserving and managing paleontological resources must focus on the likely distribution of those resources, rather than on project or parcel boundaries. The ancient ecologic system is represented paleontologically by the total inventory of all sites and other fossil remains. In this case, development in the Orange County region potentially could disturb unknown paleontological resources.

However, proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing our understanding of the past environmental conditions by recording data about sites discovered and preserving fossils found. Federal, state, and local laws are in place, as discussed above, that protect these resources. Implementation of mitigation measures MM4.4-3(a) and MM4.4-3(b) would require qualified professionals to conduct site-specific paleontological resource investigations for future development of the project site and require all earth-disturbing activity to be halted within 100 feet of any discovered resources until a qualified professional can assess the significance of the find and implement appropriate mitigation of significant impacts. Therefore, the contribution of the proposed project would not be cumulatively considerable. This cumulative impact would be ***less than significant***.

4.4.5 References

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Native American Heritage Commission (NAHC). 2008. Request for Sacred Lands Database Search for the Beach-Edinger Corridor Study Program EIR, Huntington Beach, Orange County, California. September 25.

South Central Coastal Information Center (SCCIC). 2008. Records Search for Beach-Edinger Specific Plan, SCCIC #8839.5813, September 16.